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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,143	07/22/2005	Tae-Song Kim	KIST.2120.0001	7804
869860 7590 09/30/2009 North Star Intellectual Property Law, PC P.O. Box 34688 Washington DC, DC 20043				
EXAMINER				
CANDLER, SAMUEL M				
ART UNIT		PAPER NUMBER		
3739				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/543,143

**Applicant(s)**

KIM ET AL.

**Examiner**

SAMUEL CANDLER

**Art Unit**

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 15-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 39-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This office action is responsive to the amendment filed on 6/11/2009. As directed by the amendment: claims 1-13 and 39 have been amended, and claims 15-38 remain withdrawn. Claims 1-14 and 39-42 are presently examined in the application.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 13 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Brockway et al (U.S. PGPub 2002/0138009).
4. Re claims 1-3, 13 and 39, Brockway et al discloses a sensor 400 (see paragraph [0055]; Figure 4) having first and second electrodes 405a-b (see paragraph [0055]; Figure 4) between which an electrical potential difference is generated (see paragraph [0023]) and from which a current flows through the human body to a receiver 410 (see paragraphs [0022] and [0055]; Figure 4) installed on the surface of the human body.
5. Re claim 5, Brockway et al discloses wherein the electrodes are transmitting information of a separate electrical medical device which would contain an internal circuit (see paragraph [0054]).
6. Re claims 4 and 6, Brockway et al discloses wherein the electrodes are insulated from each other (see paragraph [0053]).

7. Claims 1-3, 5, 13 and 39-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Gersheneld et al (U.S. Patent No. 5,914,701).
8. Re claims 1-3, 13 and 39, Gersheneld et al discloses a sensor 14 (see col. 4 lines 39-54; Figure 1) capable of being placed within a body having a pair of transmitting electrodes 18, 20 (see col. 2 lines 9-19 and col. 3 lines 46-48; Figure 1) between which an electrical potential difference is generated and from which a current flows through the human body to a receiver 22 (see col. 2 lines 25-39 and col. 4 lines 55-64; Figure 1) installed on the surface of the human body.
9. Re claims 5 and 40, Gersheneld et al discloses an internal circuit 16 (see col. 4 lines 40-41; Figure 1) that is electrically connected to the transmitting electrodes and can vary the voltages between the two electrodes (see col. 2 lines 9-16).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al. Brockway does not explicitly disclose any structural location for the electrodes on the sensor device. However, Brockway et al does state that 'structural, logical and electrical changes may be made without departing from the spirit and the scope of the present invention.' It is not shown that any disadvantage would be provided by simply reshaping or moving the electrodes and would therefore be obvious

to place the electrodes of Brockway in different structural locations on the sensor device. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the electrodes to cover the ends of the sensor, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

12. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Bashiri et al (U.S. Patent No. 6,165,178). Brockway et al discloses that the transmitting electrodes are insulated from each other on the sensor but fails to disclose the details of the materials of the insulating means. Bashiri et al teaches using polyethylene and parylene as electrically insulating materials (see col. 5 lines 35-40). Therefore, it would have been obvious to one of the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Bashiri et al.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Yoshioka et al (U.S. Patent No. 5,651,869). Brockway et al discloses an electrode which would be made of a conductive material, but he fails to disclose the details regarding the materials of the electrode. Yoshioka et al discloses using gold as an electrical contact and that it is known in the art (see col. 4 lines 9-13). Therefore, it would have been obvious to one of the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Yoshioka et al.

14. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway et al in view of Holmes et al (U.S. Patent No. 4,267,415). Brockway et al discloses the communication circuit operating using a very low current conducted through the body to the remote receiver (see paragraph [0053]) but fails to disclose the details of how a low current is achieved. Holmes teaches a current limiting circuit that includes a resistor with a capacitor in parallel (see col. 3 lines 28-35; Figure 1). Therefore, it would have been obvious to one of the skill in the art at the time of invention to 'fill in the gaps' of the device of Brockway et al with the details of the device of Holmes et al.

#### ***Response to Arguments***

15. Applicant's arguments filed 6/11/09 have been fully considered but they are not persuasive.

16. Regarding the Arguments concerning electrodes on the surface of Brockway et al, Figure 4 of Brockway et al clearly shows electrodes 405 a, b on the exterior of a capsule device 400.

17. Regarding the Arguments concerning the internal circuit of Brockway et al, the Examiner maintains that the capsule's connection to a supplementary medical device having an electrical system (as listed in paragraph [0054]) and then communicating information received from the supplementary medical device through the capsule to a remote receiver meets the limitations of claim 5. This system would require the circuitry of the supplementary medical device to be electrically connected to the transmitting

electrodes as the transmitting electrodes are performing the transfer of information from the supplementary medical device to the remote receiver.

18. Regarding the Arguments concerning the device of Gersheneld et al, though Gersheneld et al doesn't explicitly disclose the transmitting portion placed inside of the body, the device is still able to perform communication through the body and is therefore *capable of* performing the same functions if the transmitter of Gersheneld et al is placed within the body.

19. Regarding the Arguments of the location of the electrodes, the Examiner respectfully disagrees. While the location of the electrodes on the sensor is not explicitly disclosed, Brockway et al not only states that structural changes can be made to the device without departure from the invention (this change would not depart from the spirit of the invention), but the rearranging of parts of an invention (in this case, the placement of electrodes) would require only routine skill in the art.

20. Regarding the Arguments concerning current limiting circuit, the Examiner respectfully disagrees. Upon closer review of the device of Holmes et al, the operation of current limiting by the circuit containing resistor 51 and capacitor 52 is performed when electrodes 30 and 32 are separated. With no connection between electrodes 30 and 32, that means the circuit containing resistor 51 (with capacitor 52 in parallel) would operate as a series connection between node 40 (connected to electrode 32) and node 34 (connected to electrode 32).

**Conclusion**

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brewer (U.S. PGPub 2003/0040291) discloses a device for transmitting signals from a medical device within a body to a receiver outside of the body.

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL CANDLER whose telephone number is (571)270-3410. The examiner can normally be reached on Monday - Friday, 8 a.m. - 5 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P Leubecker/  
Primary Examiner, AU 3739

/SAMUEL CANDLER/  
Examiner, Art Unit 3739